

PATENT
USSN 09/721,506
002616US; 018-210c

CLAIM AMENDMENTS

1 to 74. *CANCELLED*

75. *(Currently amended)* An isolated, synthetic, substantially pure, or recombinant polynucleotide comprising a nucleic acid sequence that encodes a telomerase reverse transcriptase (TRT) protein, or the exact complement of said nucleic acid sequence;

wherein said TRT protein is characterized by the criteria that it has telomerase catalytic activity when complexed with a telomerase RNA, and contains an amino acid sequence that is at least 80% 95% identical to the full length of SEQ. ID NO:2.

76. *(Previously presented)* The polynucleotide of claim 75, comprising a promoter sequence operably linked to the sequence that encodes the protein.

77. *(Previously presented)* An isolated cell comprising the recombinant polynucleotide of claim 75.

78. *(Previously presented)* The cell of claim 77, which is a eukaryotic cell.

79. *CANCELLED*

80. *(Withdrawn) (Currently amended)* A method of increasing the proliferative capacity of a cell in vitro, comprising expressing in the cell a polynucleotide according to claim 75.

81 to 101. *CANCELLED*

102. *(Currently amended)* The polynucleotide of claim 75, wherein said TRT protein contains a sequence that is at least 98% identical to ~~400 contiguous amino acids in~~ the full length of SEQ. ID NO:2.

103 to 104. *CANCELLED*

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105. (New) An isolated, synthetic, substantially pure, or recombinant polynucleotide comprising a nucleic acid sequence that encodes at least 100 contiguous amino acids of SEQ. ID NO:2, which is immunogenic for an antibody specific for SEQ. ID NO:2.
106. (New) The polynucleotide of claim 105, wherein said nucleic acid sequence encodes at least 100 contiguous amino acids of SEQ. ID NO:13, which is immunogenic for an antibody specific for SEQ. ID NO:13.
107. (New) The polynucleotide of claim 105, with the proviso that it is not a polynucleotide according to claim 106.
108. (New) An isolated, synthetic, substantially pure, or recombinant polynucleotide comprising a nucleic acid sequence that encodes a protein containing an amino acid sequence that is at least 95% identical to full-length SEQ. ID NO:2, which is immunogenic for an antibody specific for SEQ. ID NO:2.